1 **Claims**

2 **Claim 1.** A computer-implemented prescription management

3 system for use by a prescriber in creating a prescription at

4 a point of patient care, said prescription being usable by a

5 pharmacist to dispense drugs, said prescription management

6 system comprising:

7 a) electronic posting means to select and capture in said

8 prescription:

9 i) a patient identifier;

10 ii) a prescribed drug;

11 iii) a dosage for said prescribed drug; and

12 iv) a patient condition intended by said prescriber to

13 be treated by said prescribed drug; and

14 b) a displayable library of prescribable drugs; and

15 c) displayable patient drug formulary information to

16 indicate to said prescriber-user selected ones of said

17 prescribable drugs included within a drug formulary

18 associated with said patient to enable compliance with drug

19 formulary guidelines at the point-of-care.

20

21 **Claim 2.** A prescription management system according to

22 Claim 1 having means to track preferred data usage by a user

23 and to adapt data displays to favor such preferred usage,

24 whereby the system learns and adapts to a user's habits.

25

26 **Claim 3.** A prescription management system according to

1   Claim 2 wherein at least one said preferred usage data

2   display comprises a personal-preference condition-selection

3   list for each system user.

4

5   **Claim 4.** A prescription management system according to

6   Claim 2 wherein at least one said preferred usage data

7   display comprises a personal-preference drug-selection list

8   for each system user.

9

10   **Claim 5.** A prescription management system according to

11   Claim 1 further comprising a patient history record

12   displayed online, said patient history record listing

13   electronically available prior prescriptions, said prior

14   prescriptions each including a prescribed drug and a

15   condition treatment objective for each drug prescribed,

16   system-created prescriptions being system-added to said

17   history record.

18

19   **Claim 6.** A prescription management system according to

20   Claim 5 comprising a patient condition list for selection of

21   a patient condition for posting to said prescription, said

22   patient condition list comprising patient conditions listed

23   in said patient history record.

24

25   **Claim 7.** A prescription management system according to

26   Claim 1 comprising a source-oriented data-retrieval

1 subsystem, said data retrieval subsystem accessing at least

2 one data-retrieval networks to supply an array of up-to-date

3 prescribing information and patient-related data to the

4 point-of-care from remote source databases.

5

6 **Claim 8.** A prescription management system according to

7 Claim 7 wherein said data-retrieval subsystem is linked to

8 the prescription management system to provide allergy and

9 interaction alerts, formulary changes, new drug approvals,

10 and to lock out or warn against, the prescribing of

11 inappropriate or recalled drugs.

12

13 **Claim 9.** A prescription management system according to

14 Claim 1 wherein said patient history record is dynamically

15 assembled online in response to a user request from multiple

16 source record elements retrieved from multiple heterogenous

17 remote databases.

18

19 **Claim 10.** A prescription management system according to

20 Claim 9 implemented on a user interface device configured

21 for networked digital communication with a host computer

22 facility, wherein said patient history record is retrieved

23 as said record elements from said remote databases by said

24 host computer facility in response to a call from said user

25 device said remote source databases being selected and

26 identified according to said patient's prior geographical

1 locations and health-care service providers.

2

3 **Claim 11.** A prescription management system according to

4 Claim 5 wherein said patient history record is a virtual

5 patient record newly assembled online in response to each

6 user request for said record thereby to be current with

7 regard to possible remote updates of said source record

8 elements.

9

10 **Claim 12.** A prescription management system according to

11 Claim 11 wherein said host computer facility logs the time,

12 date and user calling for said virtual patient record to

13 provide an audit trail of access to said patient's record,

14 or a provider's or organization's data.

15

16 **Claim 13.** A prescription management system according to

17 Claim 11 deployed comprehensively throughout a geographical

18 area, demographic, company, plan or community group whereby

19 all drug prescriptions created in said area are products of

20 said system and wherein all said drug prescriptions are

21 posted to source databases accessible to said system whereby

22 a complete patient history record of all drug prescriptions

23 created for said patient in said geographical area,

24 demographic, company, plan or community group can be listed

25 in said dynamically assembled virtual patient record.

26

1   **Claim 14.** A prescription management system according to

2   Claim 1 wherein said drugs in said drug list are classified

3   according to a patient condition for which said drugs have

4   efficacy and said prescription management system further

5   comprises a patient-condition specification procedure for

6   selecting said condition from groups of possible conditions

7   and an onscreen drug selection procedure for selecting said

8   prescribed drug from said library listing multiple drugs

9   for treating each said patient problem.

10

11   **Claim 15.** A prescription management system according to

12   Claim 1 wherein said patient drug formulary display means

13   comprises a condition-driven formulary drug list, and a

14   condition-driven nonformulary drug list, said drug lists

15   being changeable according to the patient selected.

16

17   **Claim 16.** A prescription management system according to

18   Claim 15 wherein said system provides drug efficacy

19   guidelines based on patient information and formulary

20   information.

21

22   **Claim 17.** A prescription management system according to

23   claim 3

24   wherein said prescriber-user's personal-preference list of

25   drugs displayed with formulary drugs indicated.

26

1 **Claim 18.** A prescription management system according to
2 Claim 1 including relative cost information for displayed
3 formulary drugs.

4

5 **Claim 19.** A prescription management system according to
6 Claim 1 wherein said drug formulary is generated by a
7 prescription benefits management company by providing
8 computer access to remote databases containing said drug
9 formulary information whereby appropriate formulary drugs
10 are presented to said user on screen on a user interface
11 device deployable at said point-of-care, to facilitate
12 compliance with drug formulary guidelines at said point-of-
13 care.

14

15 **Claim 20.** A prescription management system according to
16 Claim 1
17 wherein prescribability of a drug pursuant to formulary
18 guidelines is formulary-qualified according to said patient
19 condition.

20

21 **Claim 21.** A prescription management system according to
22 Claim 1 comprising built-in logic for accessing drug
23 formulary information from multiple drug formulary providers
24 wherein said drug formulary list is selected from said
25 multiple available drug formularies according to said
26 patient identification, said patient having a prior

1   arrangement with said drug formulary provider to provide

2   prescription-related benefits to that patient, said drug

3   formulary list information being dynamically presented to

4   said prescriber-user in the form of at least one selection

5   of patient-specific formularies from which a formulary

6   status indication relevant to a patient therapy-related

7   choice made by said prescriber-user is made.

8

9   **Claim 22.** A prescription management system according to

10   Claim 21 comprising network data communication means to

11   update and maintain said multiple available formularies from

12   remote source databases of formulary information.

13

14   **Claim 23.** A prescription management system according to

15   Claim 1 wherein comprising means to categorize and display

16   said patient conditions categorized into multiple lists,

17   said lists being selected from the group consisting of a

18   personal condition list of conditions encountered by the

19   prescriber, a historical condition list of conditions

20   exhibited by the patient, one or more prescriber-customized

21   condition lists, a body system condition list, conditions

22   organized according to disease pathology, therapy, personal

23   knowledge and others.

24

25   **Claim 24.** A prescription management system according to

26   Claim 23 wherein drug selection is condition driven and said

1 prescriber selects a patient condition to be treated via at

2 least one of said condition lists.

3

4 **Claim 25.** A prescription management system according to

5 Claim 24 wherein a prescriber-user can intelligently to

6 access a large body of drug data selections via multiple

7 condition-driven routes to provide multiple mapping so that

8 the user can find a suitable drug or selection of drugs via

9 different pathways according to their preferred work

10 methods.

11

12 **Claim 26.** A prescription management system according to

13 Claim 1 wherein said electronic posting means can select and

14 capture dosage and route of administration information, and

15 optionally, length-of-treatment and generic substitution

16 authorization information, for a selected drug, said

17 information being system-available for all listed drugs.

18

19 **Claim 27.** A prescription management system according to

20 Claim 26 comprising network data communication means to

21 update and maintain said dosage information said dosage

22 information being dynamically supplied from a remote source

23 database when called by the system.

24

25 **Claim 28.** A prescription management system according to

26 Claim 1 comprising a prescription expiration routine

1 including dosing, amount and expiration drug quantifiers and

2 system calculation of a relationship between said drug

3 quantifiers where said system provides default values for

4 unspecified ones of said drug quantifiers in response to

5 user selection of one or more of said drug quantifiers and

6 optionally patient history information, formulary

7 information indicating preferred drug lists for treatment.

8

9 **Claim 29.** A prescription management system according to

10 Claim 2 comprising a patient data access control subsystem

11 including data access control specification means enabling a

12 patient to authorize a user to access said patient's history

13 data and comprising data access control means whereby only

14 an authorized user can access said patient's data.

15

16 **Claim 30.** A prescription management system according to

17 Claim 29 comprising a patient data access auditor; said

18 patient data access auditor generating an access record

19 logging information as to the time date and identity of

20 entities accessing said patient history data, to provide a

21 patient data access audit trail and optionally further

22 comprising similar access audit means for generating an

23 access record logging similar information regarding access

24 to a prescriber' or organization's data.

25

26 **Claim 31.** A prescription management system according to

1   Claim 1 comprising a patient data access subsystem providing

2   patient-directed control of the flow of their own data.

3

4   **Claim 32.** A prescription management system according to

5   Claim 31 wherein said patient-directed data-access control

6   is achieved by centrally inputting to said patient data

7   access subsystem at a host computer facility, patient-

8   generated record-access specifications determining which

9   parties can access what data during what period of time.

10

11   **Claim 33.** A prescription management system according to

12   Claim 32 wherein said patient-generated record-access

13   specifications provide a patient security profile in a pre-

14   authorization file said pre-authorization file being used to

15   control access to said patient's data.

16

17   **Claim 34.** A prescription management system according to

18   Claim 1 comprising user-related historical records generated

19   by operation of said system by a prescriber-user, a user

20   data-access control subsystem including data-access control

21   specification means enabling a user to authorize selective

22   third party access to said user's history data and

23   comprising data access control means whereby only an

24   authorized third party can access said user's data and what

25   data type may be accessed by what organization or provider.

26

1   **Claim 35.** A prescription management system according to

2   Claim 20 comprising a user data access auditor, said user

3   data access auditor generating an access record logging

4   information as to the time date and identity of third

5   parties accessing said user history data, to provide a user

6   data access audit trail.

7

8   **Claim 36.** A prescription management system according to

9   Claim 1 comprising organization-generated source data

10 retrievable for display in said prescription-management

11 system from at least one remote database an organization-

12 directed data-access control subsystem including data-access

13 control specification means enabling an organization to

14 authorize selective third party access to said organization-

15 generated source data and comprising data access control

16 means whereby only an authorized third party can access said

17 organization-generated source data.

18

19 **Claim 37.** A prescription management system according to

20 Claim 36 comprising an organization data access auditor,

21 said organization data access auditor generating an access

22 record logging information as to the time date and identity

23 of third parties accessing said organization-generated

24 source data to provide an organization data access audit

25 trail.

26

1 **Claim 38.** A prescription management system according to
2 Claim 2 comprising newly created prescription evaluation
3 means to evaluate a newly prescribed drug for system-known
4 patient allergies or drug-to-drug interactions, or drug-to-
5 multiple drug interactions and absolute contraindications
6 with currently prescribed drugs, as known to the system.

7

8 **Claim 39.** A prescription management system according to
9 Claim 2 comprising a drug alert subsystem for communicating
10 alerts relating to unfavorable or cautionary characteristics
11 of particular drugs wherein said alerts are associated with
12 system information on the drug so that when a user calls up
13 the drug in question, they receive the warning or alert, or
14 other special message.

15

16 **Claim 40.** A prescription management system according to
17 Claim 39 wherein said drug alert subsystem is operative to
18 communicate drug withdrawal information to system users
19 electronically in real time or when said withdrawn drug is
20 selected for prescribing or a warning is posted directly to
21 the prescription.

22

23 **Claim 41.** A prescription management system according to
24 Claim 40 whereby a drug can be withdrawn from the market the
25 same day by making a system entry preventing completion of a
26 prescription for the withdrawn drug.

1   **Claim 42.** A prescription management system according to

2   Claim 40 wherein current users of a drug or medication can

3   be identified from prescription history records, referencing

4   not only drugs prescribed, but also prescription expiry

5   dates and both the patient and their doctor are notified of

6   said drug withdrawal optionally for the physician via direct

7   point-to-point electronic mail.

8

9   **Claim 43.** A prescription management system according to

10   Claim 1 comprising onscreen electronic mail access to other

11   users of said system, said electronic mail capability

12   additionally being linked with said prescription creation

13   function and enabling a prescriber-user to append an

14   electronic record to a prescription or prescription-related

15   record.

16

17   **Claim 44.** A prescription management system according to

18   Claim 43 wherein said electronic mail provides a platform

19   for accessing other artificial intelligence and expert

20   systems and optionally providing linkage for transaction

21   services such as the ordering and reviewing of scheduling

22   and similar administrative functions.

23

24   **Claim 45.** A prescription management system according to

25   Claim 1

26   comprising a patient-selection subsystem whereby preliminary

1 selection of groups of patients can be made by providing

2 multiple patient lists selected from the group consisting of

3 "Today's Patients", "In-Patients", "Out-Patients", "Private

4 Patients" and others.

5

6 **Claim 46.** A prescription management system according to

7 Claim 45 wherein said patient lists are system-maintained,

8 on an ongoing basis, using the latest data available to the

9 system and include intelligent patient selection means

10 enabling the user to select a convenient group of patients

11 that has a high probability of including the next patient or

12 patients to be encountered, thereby speeding access and

13 retrieval of a desired patient record.

14

15 **Claim 47.** A prescription management system according to

16 Claim 1 comprising onscreen access to drug detail

17 information as to indications, interactions, side effects

18 and precautions.

19

20 **Claim 48.** A prescription management system according to

21 Claim 1 comprising a drug literature-retrieval subsystem to

22 retrieve drug -related information across a network from a

23 remote heterogenous database for display to said user in

24 real time.

25

26 **Claim 49.** A prescription management system according to

1 Claim 48 wherein said drug literature-retrieval subsystem

2 provides the user with an access point to full disclosure

3 and prescribing information on a selected drug and wherein

4 available said drug information is selected from the group

5 consisting of drug-treatment guidelines, one or more

6 literature references supporting said guidelines, details of

7 the particular conditions for which a system-suggested

8 alternative drug has been found effective, adverse

9 conditions, preferred dosages and administration routes,

10 literature sources and other relevant drug-prescribing

11 information.

12

13 **Claim 50.** A prescription management system according to

14 Claim 49 wherein said drug literature-retrieval subsystem is

15 operative to enable a physician, to have a hard or printed

16 copy, or other media form of relevant studies or literature

17 sent to them by onscreen selection, said onscreen selection

18 being system-communicated to a source for said study or

19 literature information.

20

21 **Claim 51.** A prescription management system according to

22 Claim 49 wherein said drug literature-retrieval subsystem is

23 operative to provide a simple nonintrusive technique for

24 bringing new drug information to physicians at a point of

25 care when creating a prescription.

26

1 **Claim 52.** A prescription management system according to

2 Claim 49 comprising an outcome study subsystem for selecting

3 outcome study participants by centrally maintaining patient-

4 directed patient-record-access specifications whereby the

5 system can include records of patients agreeable to becoming

6 study participants in such outcome studies pursuant to

7 indications in their patient-record-access specifications

8 optionally with output of said study data being controlled

9 to comply with access specifications of prescribers and

10 organizations having proprietary rights thereto.

11

12 **Claim 53.** A prescription management system according to

13 Claim 1 comprising a new drug surveillance subsystem to

14 conduct post introduction market surveillance of new drugs

15 for adverse outcomes to the treatment of a specified

16 condition or conditions with the newly introduced drug.

17

18 **Claim 54.** A prescription management system according to

19 Claim 53 wherein said new drug surveillance subsystem is

20 operative to monitor patients reporting new problems after

21 having been prescribed the new drug in question, refer such

22 new problems to the physician user to qualify them for

23 medical relevance and then statistically compare a

24 collection of similar reports with data on a pool of

25 similarly treated patients for significance.

26

1   **Claim 55.**   A prescription management system according to

2   Claim 1 wherein said condition list comprises at least five

3   conditions, and said drug list comprises at least five

4   drugs.

5

6   **Claim 56.**   A prescription management system according to

7   Claim 1 wherein said drug information comprises associated

8   condition information and dosage information for at least

9   about fifty percent of all prescribable FDA-approved drugs.

10

11 **Claim 57.**   A prescription management system according to

12 Claim 1 comprising means to output a newly created

13 electronic prescription in any desired form such as to

14 print, to local or remote storage or to remote file transfer

15 as an electronic prescription.

16

17 **Claim 58.**   A prescription management system according to

18 Claim 1 comprising means for transmitting said electronic

19 prescription across a network for fulfillment by a specified

20 pharmacy.

21

22 **Claim 59.**   A prescription management system according to

23 Claim 57 comprising a printed dosage schedule output for

24 said patient.

25

26 **Claim 60.**   A prescription management system according to

1   Claim 1 wherein multiple physicians accessed by a patient

2   utilize the system described herein, with common online

3   access to, and assembly of, a patient's prescription history

4   record whereby that record provides a current record of new

5   prescriptions, then a common abuse can be controlled wherein

6   a patient presents a problem or condition to more than one

7   physician to obtain multiple prescriptions with a view to

8   indulging in abusive ingestion or illicit resale.

9

10   **Claim 61.** A prescription management system according to

11   Claim 1 wherein the system also provides, for example in the

12   patient's history record, notification from a pharmacy, or

13   from a drug benefit plan linked to the pharmacy, of

14   fulfillment of a prescription, and that information is

15   available to the prescriber, for example from the patients'

16   history record, another common abuse wherein a patient

17   pleads loss of a prescription to obtain a duplicate, can

18   also be prevented.

19

20   **Claim 62.** A prescription management system according to

21   Claim 1 wherein the system also provides, for example in the

22   patient's history record, notification from a pharmacy, or

23   from a drug benefit plan linked to the pharmacy, of

24   fulfillment of a prescription, and that information is

25   available to the prescriber, for example from the patients'

26   history record, wherein a patient's failure to have a

1 prescription fulfilled indicating discontinuance of the

2 prescribed therapy can be monitored and possibly corrected.

3

4 **Claim 63.** A prescription produced by the system of claim 1

5 output in a form selected from the group consisting of

6 electronic, paper, digitized voice and fax.

7

8 **Claim 64.** A prescription management system for electronic

9 prescription creation by a prescriber at a point of patient

10 care, said prescription being usable by a pharmacist to

11 dispense drugs, said prescription management system

12 comprising electronic posting means to select and capture in

13 said prescription:

      14   i) a patient identifier;

      15   ii) a prescribed drug;

      16   iii) a dosage for said prescribed drug; and

      17   iv) a patient condition intended by said prescriber to

18   be mitigated by said prescribed drug.

19

20 **Claim 65.** A prescription management system according to

21 Claim 64 further comprising an onscreen drug selection

22 procedure having a patient condition list specifying

23 multiple possible patient conditions, having a drug list

24 specifying multiple possible prescribable drugs and having

25 drug specification means to select and post a desired drug

26 to said prescription;

1 wherein drugs in said drug list are classified according to

2 a patient condition for which said drugs have efficacy and

3 said onscreen drug selection procedure lists multiple drugs

4 for treating each said patient problem.

5

6 **Claim 66.** A prescription management system according to

7 Claim 64 comprising drug formulary information being a

8 selected list of drugs being preferred for prescribing by a

9 drug benefit provider to said patient.

10

11 **Claim 67.** In combination, a host computer facility and a

12 prescription management system according to claim 64

13 implemented on said host computer facility said host

14 computer facility supporting network delivery of user-

15 relevant components of said prescription management system

16 to multiple remote user interface devices and providing data

17 and communications resources for users to draw upon

18 employing said interface devices.

19

20 **Claim 68.** A combination according to claim 67 wherein said

21 host computer facility can communicate with multiple

22 heterogenous remote databases to retrieve complementary data

23 elements from said databases and comprises:

24   i) a dynamic record assembly procedure for online assembly

25   of a data record from said complementary data elements;

26   and

1   ii) a user-device communication procedure to deliver said

2   dynamically assembled record to a calling user-

3   interface device as an integral data component of said

4   prescription management system.

5

6   **Claim 69.** A professional product specification system for

7   electronically creating a technical specification usable by

8   a professional to specify technical products said product

9   specification system comprising:

10   a) electronic posting means to select and capture in said

11   prescription:

12   i) a customer identifier;

13   ii) a specified product; and

14   iii) product specifications; and

15   b) an onscreen product selection procedure having a

16   product benefit list specifying multiple possible

17   customer benefits having a product list specifying

18   multiple possible specifiable products and having

19   product specification means to select and post a

20   desired product to said specification;

21 wherein products in said product list are classified

22 according to a customer-useful technical purpose attainable

23 with said products and said onscreen product selection

24 procedure lists multiple products for providing each said

25 customer benefit.